ENDO, et al., 10/771,743   566.43491X00 / XN 187501US1
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A route search method for a navigation device, wherein

the navigation device includes a storage device which stores map data including link data of respective links constituting roads on a map, and statistical data including travel time or moving speeds of the respective links determined by statistical values of traffic information collected in the past, said statistical data being classified every condition of collection of the traffic information, and

the route search method comprises:

setting step which sets a departure position, a destination, and conditions of collection; and

recommended route searching step which searches a recommended route from the departure position to the destination, by using the map data stored in the storage device and statistical data corresponding to the conditions of collection set in the setting step out of the statistical data stored in the storage device.

2. (Original) The route search method according to claim 1, wherein

the statistical data includes travel time or moving speeds of the respective links every time zone, and

the recommended route searching step searches the recommended route by using, as travel time of respective first candidate links constituting the recommended route, travel time corresponding to a time zone including a departure point of time at

the departure position included or travel time obtained from moving speeds

corresponding to the time zone concerning and, as travel time of respective (n)th

(n≥2) candidate links constituting the recommended route, travel time corresponding

to a time zone including an expected arrival point of time at the termination node of a

(n-1)th candidate link contiguous to the (n)th candidate link or travel time obtained

from moving speeds corresponding to the time zone concerned.

3. (Original) The route search method according to claim 1, further

comprising:

travel time calculating step which calculates travel time or an expected arrival

point of time for the recommended route by using travel time of respective links

constituting the recommended route used in searching the recommended route in

the recommended route searching step, and

travel time displaying step which displays travel time or an expected arrival

point of time for the recommended route which is calculated in the travel time

calculating step.

4. (Original) The route search method according to claim 3, wherein

the statistical data includes a degree of dispersion in traffic information being

a source of travel time or moving speeds of the respective links,

the travel time calculating step calculates an error in travel time for the

recommended route by using degree of dispersion in traffic information being a

source of travel time or moving speeds of respective links constituting the

recommended route, said travel time or moving speeds being used in searching the

recommended route in the recommended route searching step, and

the travel time displaying step displays travel time or an expected arrival point

of time for the recommended route which is calculated in the travel time calculating

step, and an error thereof.

5. (Original) The route search method according to claim 3, wherein

the statistical data includes a degree of jam every time zone of the respective

links,

the travel time calculating step determines a degree of jam in respective

sections which are obtained by dividing the recommended route into a plurality of the

sections, by using a degree of jam in a time zone corresponding to travel time or

moving speeds of respective links constituting the recommended route, said travel

time or moving speeds being used in searching the recommended route in the

recommended route searching step, and

the travel time displaying step displays travel time for the recommended route

which is calculated in the travel time calculating step, and a degree of jam in the

respective sections of the recommended route.

6. (Original) The route search method according to claim 2, wherein

the navigation device has a current position calculating function, and further

comprising:

route guidance step which performs route guidance to the destination by

using the recommended route searched in the recommended route searching step

and the current position calculated by the current position calculating function, and

expected arrival point of time correcting step which corrects an expected

arrival point of time at the destination by calculating travel time for a section between

the destination and the current position which disposed on the recommended route

and is calculated by the current position calculating function, wherein

the expected arrival point of time correcting step calculates travel time for the

section, by using, as travel time for a first link constituting the section, travel time

corresponding to a time zone including current time, or travel time obtained from

moving speeds corresponding to the time zone concerned, and as travel time for

respective (m)th (m≥2) links constituting the section, travel time corresponding to a

time zone including a point of time obtained by adding to current time total travel time

between the first link and a (m-1)th link, or travel time obtained from moving speeds

corresponding to the time zone concerned, and adds to current time the travel time

for the section to obtain an expected arrival point of time at the destination.

7. (Original) The route search method according to claim 2, wherein

the navigation device has a current position calculating function, and further

comprising:

route guidance step which performs route guidance to a destination by using

a recommended route searched in the recommended route searching step and a

current position calculated by the current position calculating function, and

re-search judgment step which compares actual travel time for a section on

the recommended route from the departure position to the current position, with

travel time for the section concerned on the recommended route which is obtained

from travel time for respective links constituting the recommended route and used in

searching the recommended route in the recommended route searching step, and

judges the necessity of searching a recommended route again according to the

result of the comparison, and wherein

the route searching step searches a recommended route to the destination

set in the setting step again with the current position calculated by the current

position calculating function as a departure position and current time as a departure

point of time in the case where it is judged in the re-search judgment step that it is

necessary to search a recommended route again.

8. (Original) A route search method for a navigation device which has a

current position detecting function, wherein

the navigation device includes a storage device which stores map data

including link data of respective links, and statistical data including travel time or

moving speeds of the respective links constituting roads on the map, said travel time

or moving speeds being determined by traffic information statistical values collected

in the past, and the route search method comprising:

setting step which sets a departure position,

present status data obtaining step which obtains present status data including

travel time or moving speeds determined by present traffic information of respective

links located in a peripheral region of the current position detected by the current

position detecting function, from outside, and

     route searching step which searches a recommended route from the current

position to the destination by using the map data and the statistical data stored in the

storage device and the present status data obtained in the present status data

obtaining step.

     9. (Currently Amended) The route search method according to claim 8,

further comprising

     general present status data obtaining step which obtains general present

status data including a degree of jam in respective links located in the peripheral

region of the current position, from outside, and wherein

     the statistical data includes a degree of jam in travel every link, and

     in the case where a degree of jam in respective links located in the peripheral

region of the current position, which is indicated by the general present status data,

and a degree of jam in respective links located in the peripheral region of the current

position, which is included in the statistical data, are different from each other, the

present status data obtaining step obtains present status data of respective links

located in the peripheral region of the current position, from outside;.

10. (Original) The route search method according to claim 8, further comprising

general present status data obtaining step which obtains general present status data including a degree of jam in respective links located in the peripheral region of the current position, from outside, and wherein

the present status data includes a degree of jam in travel every link, and

in the case where the general present status data of respective links located in the peripheral region of the current position has been obtained, and a degree of jam in respective links located in the peripheral region of the current position, which is indicated by the general present status data concerned, and a degree of jam in respective links located in the peripheral region of the current position, which is indicated by the already obtained general present status data, are different from each other,

the present status data obtaining step obtains again, from outside, present status data of respective links located in the peripheral region of the current position.

11. (Original) The route search method according to claim 8, wherein

the present status data obtaining step does not newly obtains present status data of respective links located in the current position, from outside, until a predetermined period of time has elapsed since the present status data is obtained.

12. (Original) The route search method according to claim 8, wherein

the present status data obtaining step newly obtains present status data of respective links located in the peripheral region of the current position, from outside,

in the case where a predetermined period of time has elapsed since the present

status data is obtained.

13. (Original) The route search method according to claim 8, further

comprising

traffic restriction information obtaining step which obtains traffic restriction

information for roads from outside, and wherein

the present status data obtaining step obtains present status data of

respective links located in the peripheral region of the current position, from outside,

in the case where traffic restriction information for the peripheral region of the current

position is obtained.

14. (Original) The route search method according to claim 8, wherein

the route searching step searches the recommended route by using, as travel

time for respective first candidate links constituting the recommended route, travel

time in the present status data or travel time obtained from moving speeds in the

present status data, and as travel time for respective (n)th (n≥2) candidate links

constituting the recommended route, travel time in the present status data or travel

time obtained from moving speeds in the present status data, which is provided in

the case that a time difference between an expected arrival point of time at the

termination node of a (n-1)th link contiguous to the (n)th link and a departure point of

time at the departure position is below a predetermined value, and travel time in the

statistical data or travel time obtained from moving speeds in the statistical data,

which is provided in the case that the time difference is not less than the

predetermined value.

15. (Original) The route search method according to claim 8, wherein

the route searching step searches the recommended route by using, as travel

time for candidate links of respective links constituting the recommended route,

travel time in the present status data or travel time obtained from moving speeds in

the present status data for candidate links located in the peripheral region of the

current position, and travel time in the statistical data or travel time obtained from

moving speeds for candidate links located outside the peripheral region of the

current position.

16. (Original) The route search method according to claim 8, further

comprising:

travel time calculating step which calculates travel time for the recommended

route or an expected arrival point of time by using travel time of respective links

constituting the recommended route used in searching the recommended route in

the route searching step, and

travel time displaying step which displays travel time for the recommended

route or an expected arrival point of time calculated in the travel time calculating

step, and wherein

the statistical data and the present status data include a degree of jam in

every link,

the travel time calculating step determines a degree of jam in respective

sections which are obtained by dividing the recommended route into a plurality of the

sections, by using a degree of jam in the present status data for the link for which the

present status data are used in the route searching step, and a degree of jam in the

present status data for the link for which the statistical data are used in the route

searching step, among links constituting the recommended route, and

the travel time displaying step displays travel time for the recommended route

calculated in the travel time calculating step, and a degree of jam in respective

sections of the recommended route.

17. (Original) The route search method according to claim 8, further

comprising:

travel time calculating step which calculates travel time or an expected arrival

point of time for the recommended route searched in the route searching step by

using the statistical data stored in the storage device and the present status data

obtained in the present status data obtaining step, and

travel time displaying step which displays travel time for the recommended

route or an expected arrival point of time calculated in the travel time calculating

step.

18. (Original) The route search method according to claim 8, further

comprising:

route guidance step which performs route guidance to the destination by

using the recommended route searched in the recommended route searching step

and the current position calculated by the current position calculating function, and

expected arrival point of time correcting step which corrects an expected

arrival point of time at the destination by calculating travel time for a section between

the destination and the current position which is disposed on the recommended

route, and wherein

the expected arrival point of time correcting step calculates travel time for the

section, by using, as travel time for a first link constituting the section, travel time for

the link determined from the present status data or travel time obtained from moving

speeds for the link determined from the present status data, and as travel time for

respective (m)th (m≥2) links constituting the section, travel time for the links

determined from the present status data or travel time obtained from moving speeds

for the links determined from the present status data, which is provided in the case

that total travel time from the first link to a (m-1)th link is below a predetermined

value, and travel time for the link in the statistical data or travel time obtained from

moving speeds for the link in the statistical data, which is provided in the case that

the total travel time is not less than the predetermined value, and adds travel time for

the section to current time to obtain an expected arrival point of time at the

destination.

19. (Original) The route search method according to claim 8, further comprising:

route guidance step which performs route guidance to the destination by using the recommended route searched in the recommended route searching step and the current position, and

expected arrival point of time correcting step which corrects an expected arrival point of time at the destination by calculating travel time for a section between the destination and the current position disposed on the recommended route, and wherein

the expected arrival point of time correcting step calculates travel time for the section, by using, as travel time for respective links constituting the section, travel time for links located in the peripheral region of the current position in the present status data or travel time obtained from moving speeds for the links concerned in the present status data, and travel time for links located outside the peripheral region of the current position in the statistical data or travel time obtained from moving speeds for the links concerned in the statistical data, and adds to current time the travel time for the section to obtain an expected arrival point of time at the destination.

20. (Cancelled)